

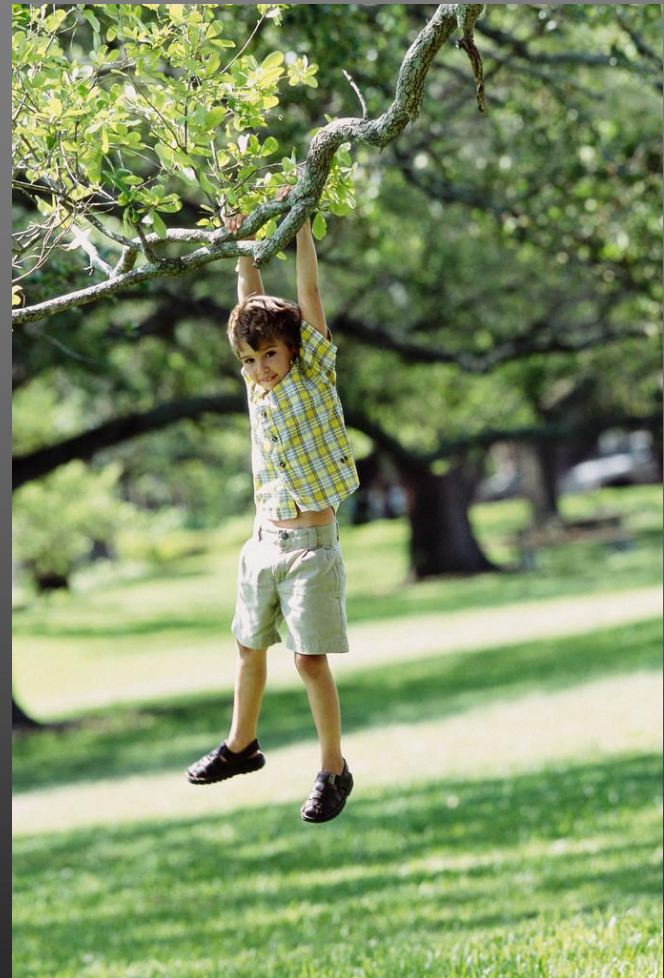
The background is a collage of several photographs. At the top left is a close-up of a young boy with light brown hair and blue eyes, looking upwards. Next to him is a girl with dark hair looking off to the side. To the right is a close-up of a child's face with their eyes closed. Further right are two young boys in blue patterned shirts, one smiling and one looking thoughtful. Below these are more faces: a girl in a pink shirt, a boy in a tan shirt, a girl with dark hair smiling, and a girl with blonde hair. At the bottom left is a family scene with a man, a woman, and a child all with their arms raised in the air. At the bottom center are two boys, one in a red shirt and one in a grey shirt, both smiling. At the bottom right is a close-up of a girl with long brown hair.

# **Understanding Children's Mental Health Disorders and the Impact on Learning and Functioning**



# Introduction to Children's Mental Health

## Attention and Behavior Disorders



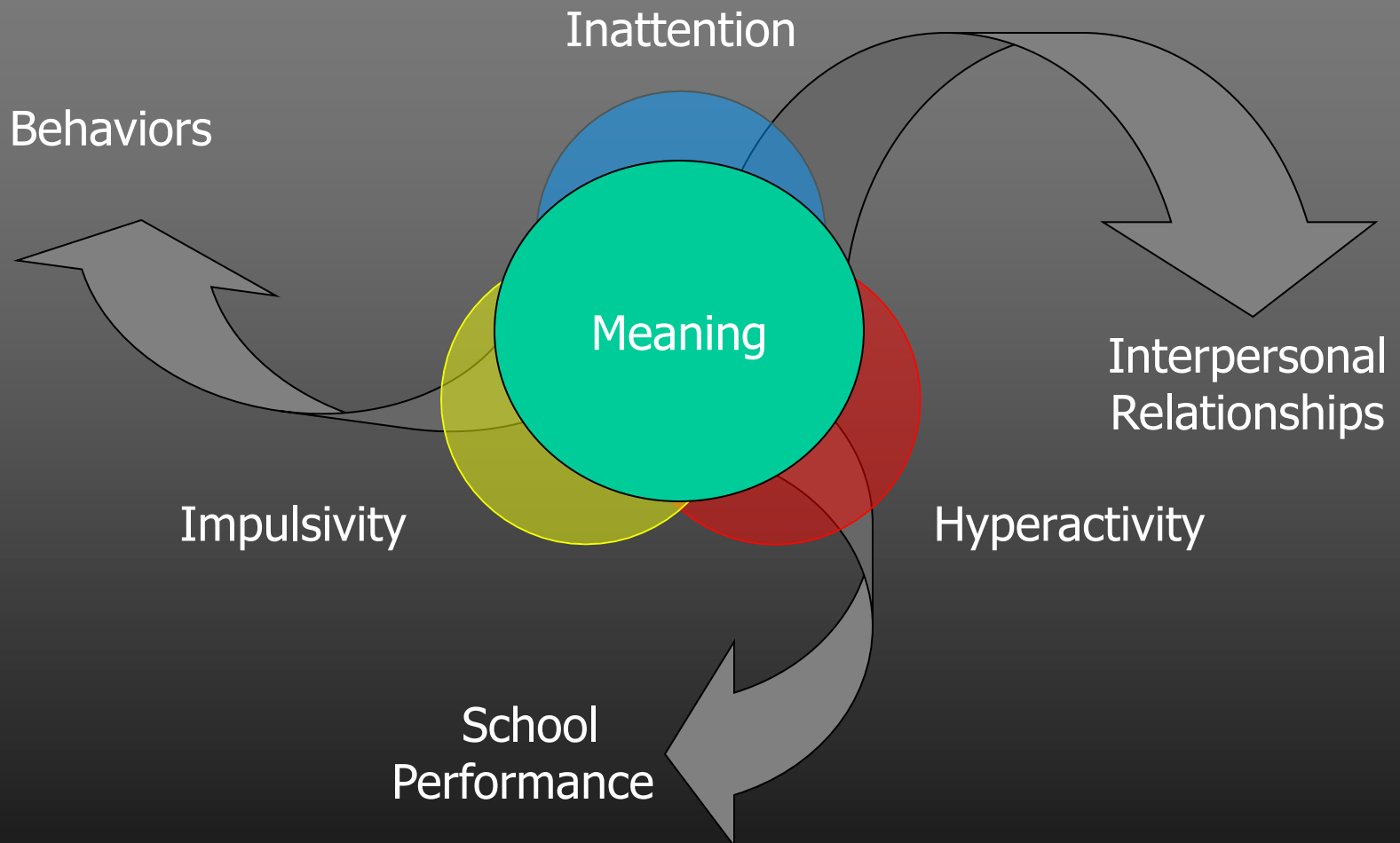


# What is Attention Deficit Hyperactivity Disorder?

- A condition due to the brain's inability to regulate
  - Attention
  - Activity
  - Self-control
    - Behaviors
    - Thoughts
    - Emotions



# Attention Deficit Hyperactive Disorder



# Mental Health Treatment in Minnesota

Nearly 1 in 10 children and adolescents in Minnesota have been diagnosed with a mental health condition.

Of the children receiving treatment:

27%	Attention Deficit Hyperactive Disorder
24%	Depression
15.5%	Anxiety
15.5%	Adjustment Disorders
11%	Disruptive Behavior Disorders

# Core Symptoms



**Inattention**



**Impulsivity**



**Hyperactivity**

# Inability to Regulate Attention



- Disorganized
- Avoiding tasks that require focus
- Lose things
- Distracted
- Forgetful
- Not very careful
- “Hyperfocus”



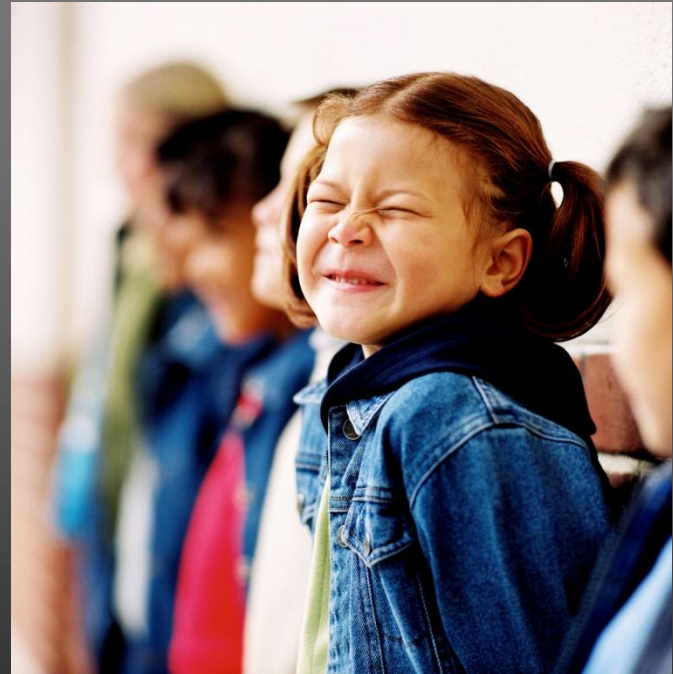
# Inability to Regulate Activity

- Fidgets
- Restless
- Loud
- Constant motion
- Easily excitable
- Talk excessively



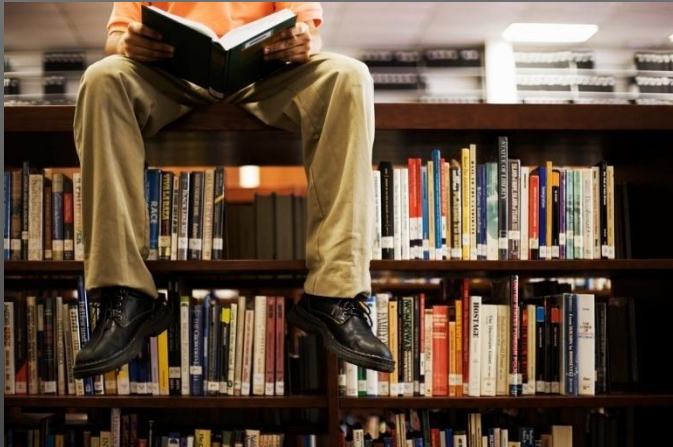
# Inability to Regulate Self Control

- Thoughts
  - Fast / jumpy thinking
- Impulsive
  - Blurts out
  - Interrupts
  - overreacts
- Emotionally intense



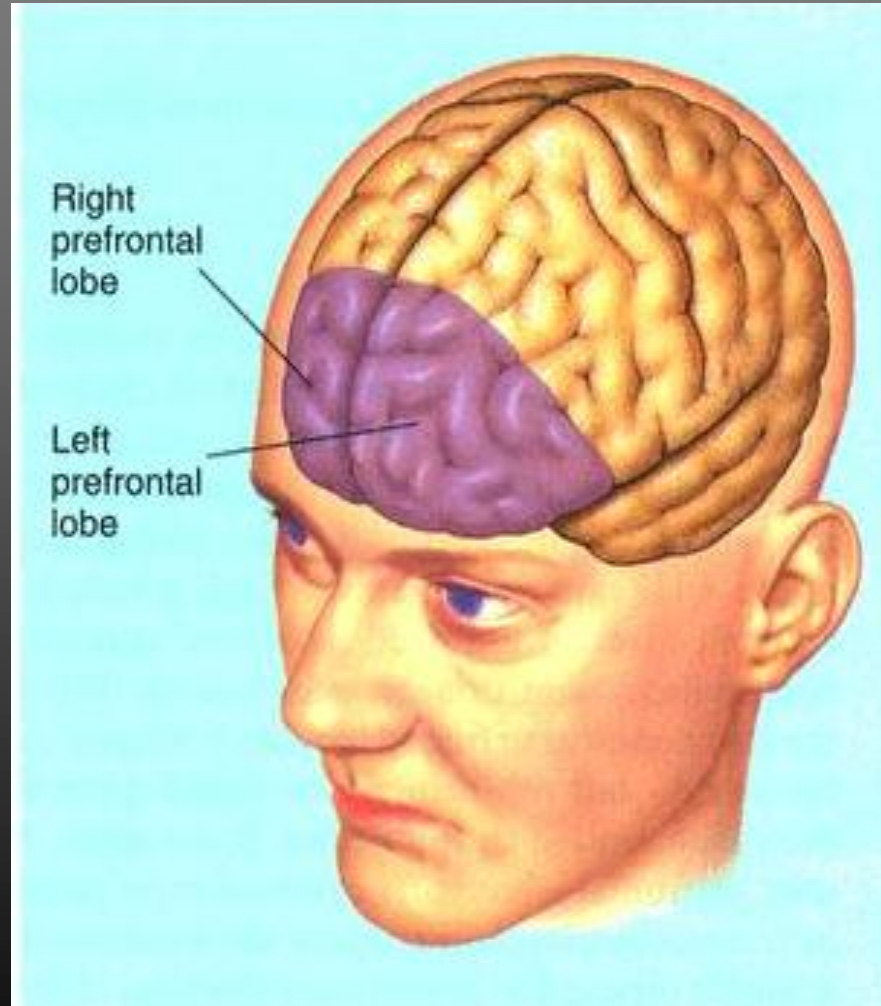
# Changes to our Thinking

- Not the inability to pay attention
- The inability to regulate attention
- Emotional immaturity due to developmental delay in the brain circuitry involved in **inhibition** and **self-control**
- 3 year lag in emotional maturity



# Prefrontal Cortex

Regulates individual's ability to stay focused, sustain attention, control impulses, and make decisions.



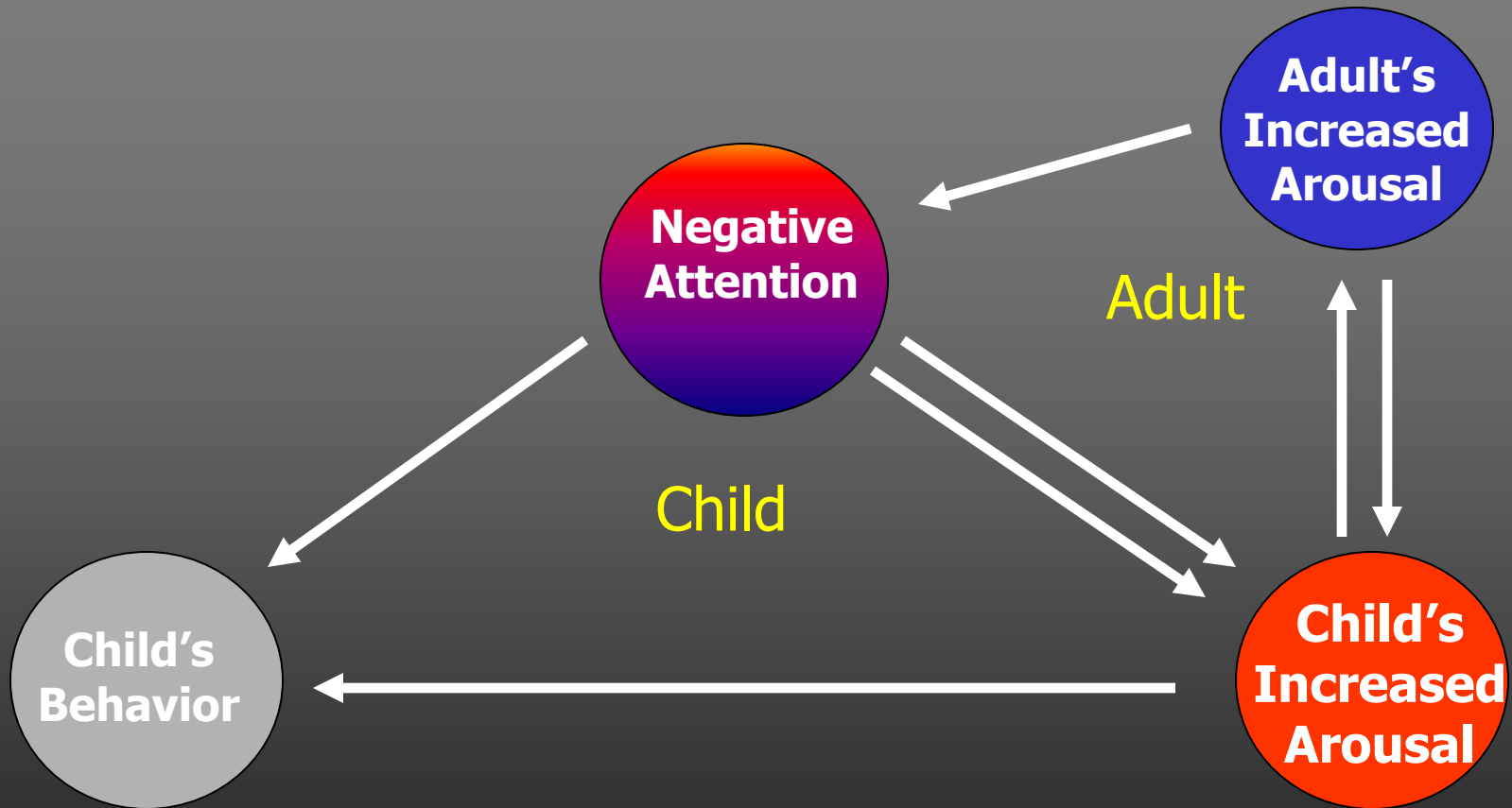


# Delay in Development of Executive Functions

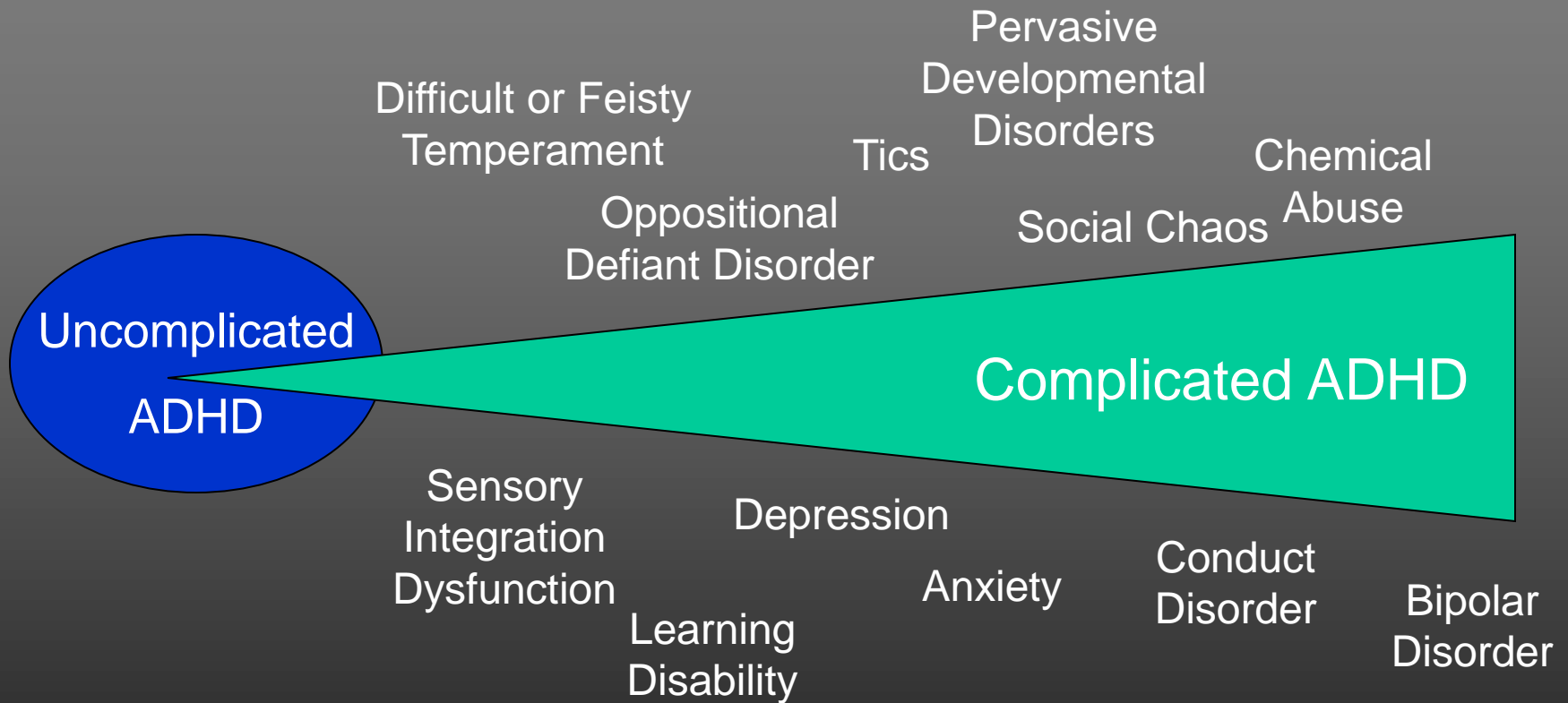


- Impaired working memory
- Inability to use thoughts to direct ourselves
- Inability to recognize social cues
- Inability to integrate newly learned information with previous learned information
- Impaired regulation of emotions, motivation and **state of arousal**

# Negative Attention Cycle



# Spectrum of Attention and Behavior Disorders



# Top 3 Take Home Messages



Understand Executive  
Function Impairment

Understand Inability to  
Regulate Emotions

Understand the Social as  
well as Academic  
Implications



# Understand Executive Function Deficits

- Difficulty holding information in the mind while working on a task
- Problems with controlling emotions, staying motivated and being easily overly stimulated
- Difficulty recognizing and remembering previously learned skills in new situations



# Inability to Regulate Emotions

- Less ability to regulate own emotional states
- Emotionally immature when compared to other kids their own age
- Negative redirection social feedback create increased risk for greater emotional and behavioral problems



# Social Impairment

- Inability to recognize social cues and access previously learned social skills
- The impulsivity and problems with emotional control often lead to
  - peer relationship problems
  - Negative attention from adults



# Impact on Learning

Difficulty listening to lectures

Difficulty staying seated

Quick to lose interest

**Over Active**

**Inattention**

Difficulty completing assignments

Constant restlessness

Forgetful

**Impulsivity**

Needs lots of stimulation

Acts without considering consequences

May have difficulty with group projects



# Promoting Wellness in Children with ADHD

Physical wellness

Social and  
emotional wellness

Accessing care



# Physical Wellness

- Regular Bedtime Routine
- Adequate amount of sleep
- Healthy Diet high in protein and omega-3 fatty acids
- Physical activity for self-modulation



# Promoting Social and Emotional Wellness

- Calming and self-soothing (reverse tendency to over-stimulation) activities
- Positive attention and feedback from adults and peers
- Opportunities for success behaviorally, socially and academically



# Accessing Care

- Primary care visits
- Mental health care visits
- Regular Counseling/  
Therapy
- Medications
- Coordination between  
family, school, doctors,  
and counselors





# Summary

- ADHD is a chronic condition
- The social implications are critical
- Management of attention and behavior disorders should involve physical, personal and clinical interventions



# Summary

- Complicated ADHD requires more intensive approaches to treatment and follow-up
- Treatment should target specific areas to MAXIMIZE functioning
- We need to break the cycle of constant negative feedback these children receive by going out of our way to give them positive attention and reinforcement





**The End**



For additional information and resources contact:

Minnesota Department of Human Services

Phone: (651) 431-2368

E-mail:

Website: <http://www.dhs.state.mn.us>

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Assistant Commissioner of Chemical and Mental  
Health Services.



# References

- Minnesota Department of Health, 2004. *Promoting Mental Health and Suicide Prevention*. St. Paul, MN. <http://www.health.state.mn.us>
- Minnesota Council of Health Plans, 2008, *Minnesota's Mental Health*. St. Paul, MN <http://www.mnhealthplans.org>
- Shaw et al., Proc Natl Acad Sci 2007;104:19649-19654
- J. Am. Acad. Child Adolesc. Psychiatry, 2007;46(7):894Y921
- Jensen, PJ et al., ADHD Comorbidity Findings From the MTA Study: Comparing Comorbid Subgroups. Journal of the American Academy of Child & Adolescent Psychiatry. 40(2):147-158, February 2001.